

110.1 - Foods and Beverages (liquid and powder forms)

These SRMs are for validation of analytical procedures and calibration of apparatus used in the analysis of trace elements and other analytes in foods and related products.

For Related SRMs

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SRM Description	1549	1566b	1567a	1568a	1570a	1577c	1953	1954	2384	2385	3254	3255	3256	3276	3278	3281
Unit of Issue	Non-Fat Milk Powder (100 g)	Oyster Tissue (25 g)	Wheat Flour (80 g)	Rice Flour (80 g)	Trace Elements in Spinach Leaves (60 g)	Bovine Liver (20 g)	Organic Contaminants in Non-Fortified Human Milk (5 vials x 5 mL)	Organic Contaminants in Fortified Human Milk (5 vials x 5 mL)	Baking Chocolate (5 X 91 g)	Slurried Spinach (4x70 g)	Camellia sinensis (Green Tea) Leaves (5 packets x 3 g each)	Camellia sinensis (Green Tea) Extract (5 packets x 1 g each)	Green Tea-Containing Solid Oral Dosage Form (5 packets x 2.5 g each)	Carrot Extract in Oil (5 ampoules)	Tocopherols in Edible Oils (5 x 1 mL)	Cranberry (fruit) (5 packets x 6 g each)
Concentrations are in mg/kg, unless noted by a single asterisk for mass fraction, in %																
Caffeine									1060		23500	36900	70000			
Catechins									X		X	X	X			
Theobromine									11600		463	867	1040			
Aluminum	(2)	197.2	5.7	4.4	310											
Amino Acids																
Antimony	(0.00027)	0.011		(0.0005)		0.00313										
Arsenic	(0.0019)	7.65	(0.006)	0.29	0.068	0.0196								0.269		
Ascorbic Acid																
Ash		3.87*			14.66*				2.78*							
Barium		8.6														
Boron		4.5			37.6											
Bromine	(12)		(6)	(8)												
Cadmium	0.0005	2.48	0.026	0.022	2.89	0.0970							0.025			
Calcium	1.30*	0.0838*	0.0191*	0.011*		131	257	257	840	624						528
Calories(kcal/100g)									631.0	18.16						
Concentrations are in mg/kg, unless noted by a single asterisk for mass fraction, in %																
Carbohydrate									32.4*							
Carotenoids														X		
Cesium						0.0217										
Chlorine	1.09*	0.514*	(565)	(300)		0.287*										
Chromium	0.0026					0.300										
Cobalt	(0.0041)	0.371	(0.006)	(0.018)												
Copper	0.7	71.6	2.1	2.4		275.2	0.268	0.268	23.2	0.9						3.52
Dietary Fiber-Total		6.5*			30.5*				14.5*							
Europium					0.0055											
Fat									51.4*							
Fatty Acids									X							
Fluorine	(0.20)															
Fructose																4.51*
Glucose																21.6*
Hydrogen		7.2				7.35*										
Iodine	3.38		(0.0009)	(0.009)												
Concentrations are in mg/kg, unless noted by a single asterisk for mass fraction, in %																
Iron	1.78	205.8	14.1	7.4	197.94	0.194	0.194	132	17							27.7
Lead	0.019	0.308	(^c 0.020)	(^c 0.010)	(0.20)	0.0628							0.316			
Lithium					(12)											
Magnesium	0.120*	0.1085*	0.040*	0.056*	620	32.4	32.4	2570	368							446
Manganese	0.26	18.5	9.4	20.0	75.9	10.46	0.040	0.040	20.3	3.8						21.9
Mercury	0.0003	0.0371	(0.0005)	0.0058	0.030	0.00536	0.000101	0.000101					0.014			
Methylmercury		0.0132														
Moisture		4.6*			3.45*											
Molybdenum	(0.34)		0.48	1.46	3.30											
Niacin								12.1								
Nickel	1.04		(0.16)	2.14	0.0445											
Nitrogen	7.6*			6.06*	10.30*											
Organic Acids																X
PBB							X	X								
PBDE							X	X								
PCB							X	X								
Concentrations are in mg/kg, unless noted by a single asterisk for mass fraction, in %																
PCDD(Dioxins)PCDF(Furans)							X	X								
Pesticides							X	X								
Phosphate																
Phosphorus	1.06*		0.134*	0.153*		1.175*	135	135	3330	323.7						835
Potassium	1.69*	0.652*	0.133*	0.1280*		1.023*	462	462	8200	3650						8020
Procyanidins									X							
Protein		42.6*			35.8*				13.18*							
Protein Nitrogen		6.82*			5.68*											
Rubidium	(11)	3.26	0.68	6.14	12.7	35.3										
Scandium					0.0055											
Selected Fatty Acids									X					X		
Selenium	0.11	2.06	1.1	0.38	0.117	2.031										
Silicon	(^{<} 50)				(6)											
Silver	(^{<} 0.0003)	0.666			0.0059											
Sodium	0.497*	0.3297*	6.1	6.6	0.2033*	127	127	40	47							259
Solids		95.4*			96.55*				98.37*							
Concentrations are in mg/kg, unless noted by a single asterisk for mass fraction, in %																

"X" indicates parameter is characterized. See certificate for further details regarding values.

Certified values are normal font.

Reference values are italicized.

Values in parentheses are for information only.

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Strontium	6.8				55.6	0.0953			
Sulfate									
Sulfur	0.351*	0.689*	0.165*	0.120*	(0.46)*	0.749*			
Tellurium				(0.002)					
Thorium		0.0367			0.048				
Tin	(< 0.02)	0.031		(0.0033)		(0.0047)			
Tocopherols								X	X
Total Sugars									26.2*
Uranium		0.2550	(0.0003)	(0.0003)	0.155				
Vanadium		0.577	(0.011)	(0.007)	0.57	0.00817			
Vitamin B ₂							1.21		
Zinc	46.1	1424	11.6	19.4	82		36.6	8.4	6.9

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10.1	1170
2.86*	60.4*
	2.79
0.15	6.49

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